



Design Innovation for the UMPC Platform

Introduction

Design Research

User Scenarios

Product Proposals

June 8, 2006



Prepared by

Introduction

- Analyze and identify possible user-machine interface combinations for the Ultra Mobile PC platform ('UMPC').
- Address how this new powerful platform could change the way we use computers in our daily life.

New Size Implications

- The UMPC falls in between laptops, PDA's and mobile phones.
- While it is not a pocketable device, it is small enough to be kept close at hand.

Finding Applications

- Success will highly depend on how companies solve an underlying need by creating niche- focused applications.
- Future devices should target those consumers and business people that are not eager to sacrifice computing power over mobility.

The New Market Strategy

- Consumer communities are growing more diversified.
- They are rebelling against standardization.
- in 1970 consultants classified 40 different lifestyles in the US, today this number is up to 66, a 65% increase.
- We are on the verge of a marketing revolution.
- Large retailers and consumer companies are moving away from one-size-fits-all.
- Smart companies are starting to use a customization-by-clusters strategy.
- Organizations find communities that exhibit similarities in demands.
- These are molded into manageable modules that are the right size to produce economy-of-scale.

Considering the new **powerful platform** and the emerging new global marketing strategy of **customization-by-clusters**, the team decided to look at the UMPC from a user's perspective.

Rather than reiterating usage scenario's such as gaming, health management, sharing digital images, watching movies and so forth, we studied to see if we can propose **concrete device proposals** that may be producible in the near future.

Criteria we looked at are:

- User focused design solutions.
- Combine currently documented usage scenarios into actual product solutions.
- Keep in mind that, when using full-blown Windows®, the user may not be willing to give up keyboard usage.
- Focused niche applications (avoid the Swiss-knife effect)



Design Through Study and Elimination

Word Associations



Visual Associations



Word Associations



UMPC.

Who:

- 14 Taxi Driver
- 15 Driver
- 16 Delivery
- 17 Reporter
- 18 Writer
- 19 Doctor
- 20 Detective
- 21 President
- 22 Terrorist
- 23 Bank Robber
- 24 Missionary
- 25 Trust
- 26 Nurse
- 27 Sporting
- 28

1. Geologist

2. Doctor

3. Student

4. Farmer

5. Traveler

6. Zoologist

7. Designer

8. Teacher

9. Policeman

The design team goes through several sessions where they rapid fire 100's of suggestions.

Post-it's are used to mark ideas relevant to the project.



Word Associations



Visual Associations



Word Associations



The selected word associations are then categorized in possible user groups.

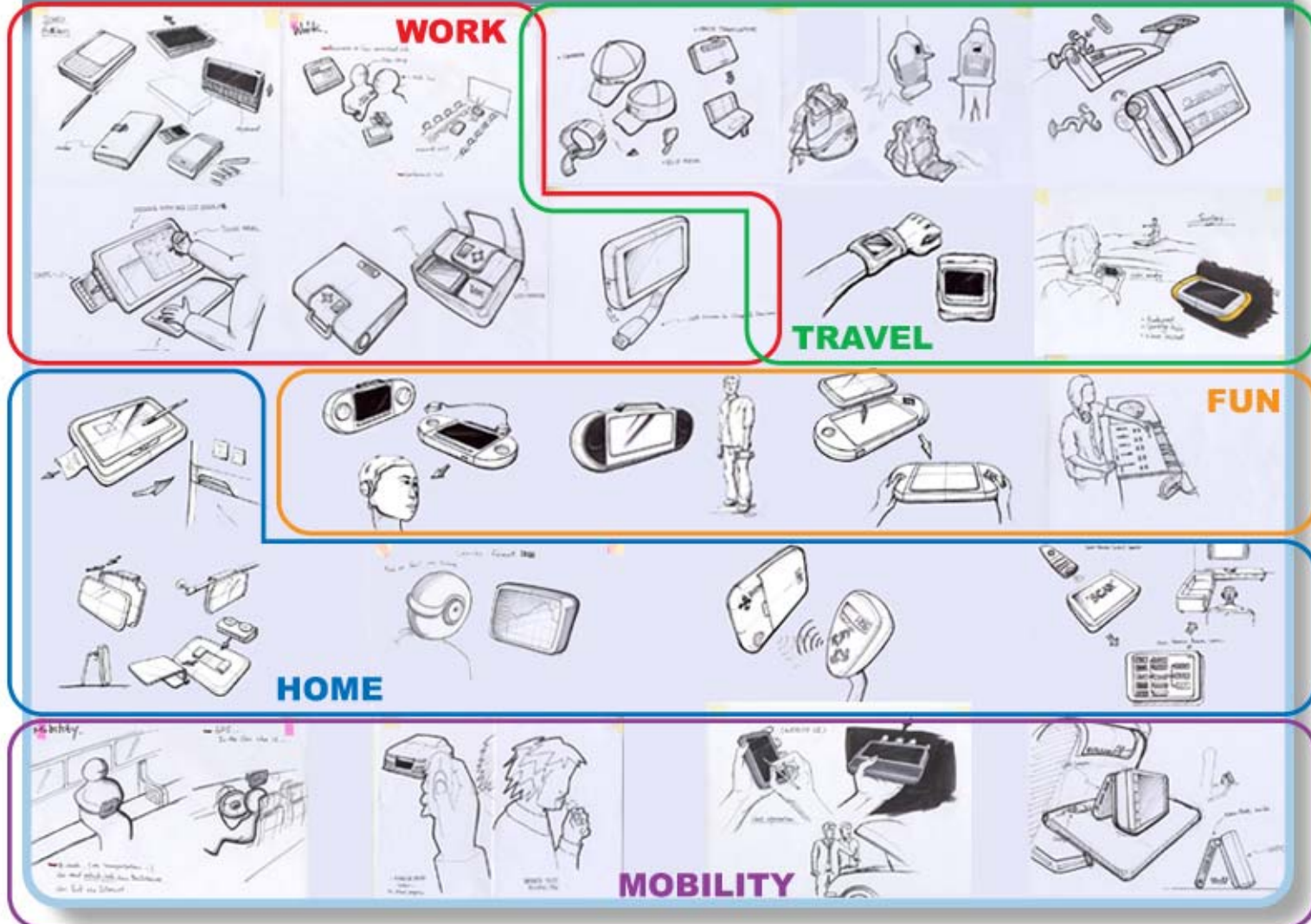
Visual queues are added to create reference design languages for each set.



First Idea Sketching



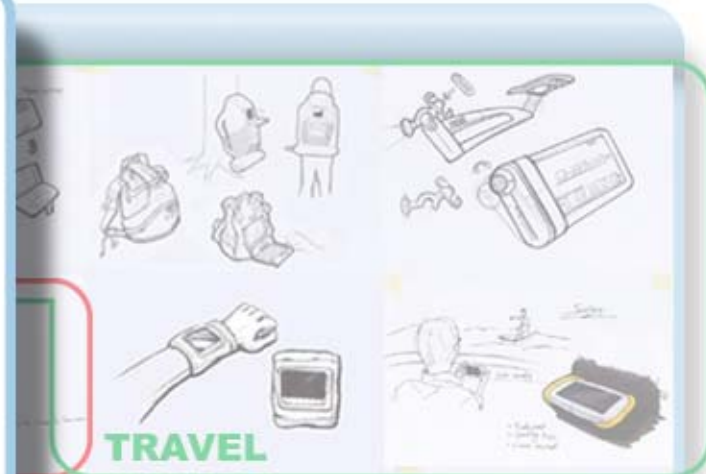
First Idea Sketching





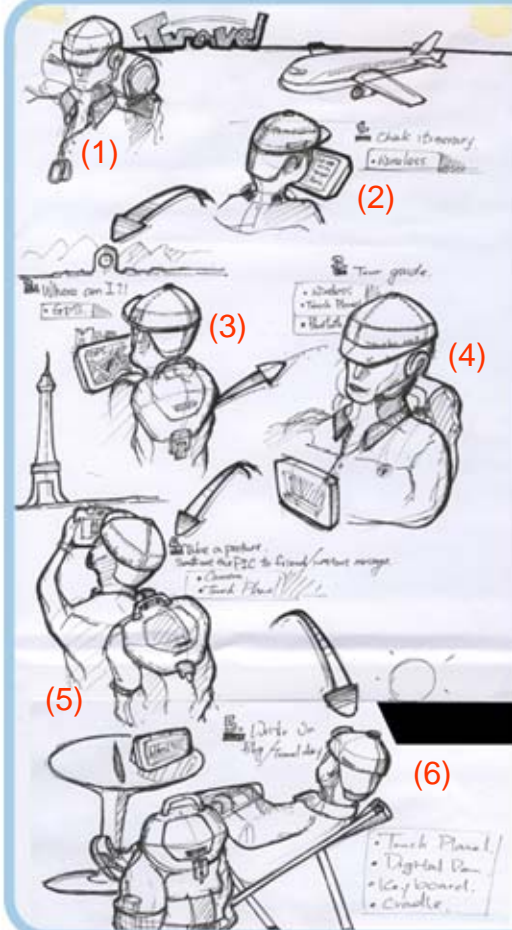
Visual idea sketches were presented to the entire CRE8 team (20 people).

After implementing the inputs and suggestions from designers, CRE8 held a workshop at VIA to probe their thinking on UMPC use.



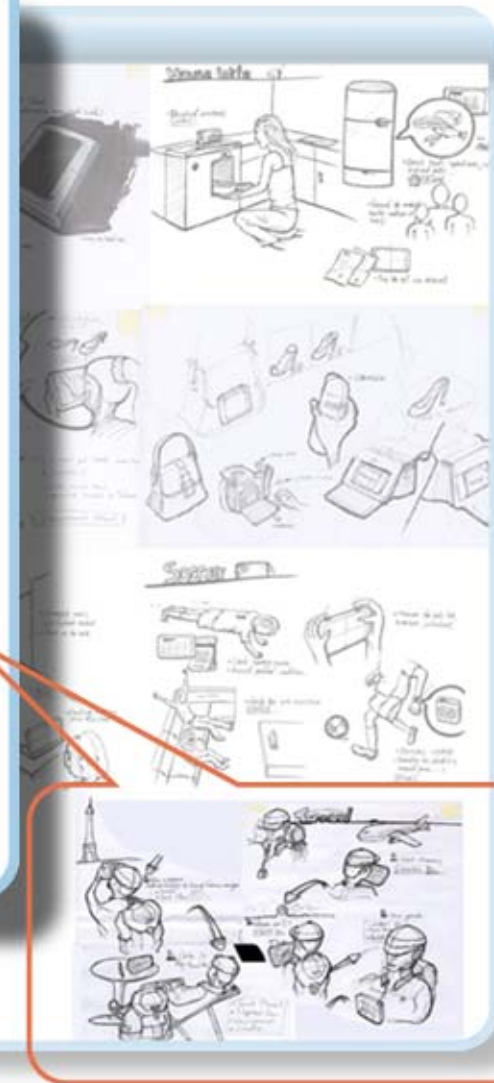
User Scenarios





Example

- 1) Listening to music in the plane.
- 2) UMPC acts as voice operated translator.
- 3) City tour guide is wirelessly uploaded.
- 4) Watch a movie while on the bus.
- 5) Take holiday pictures.
- 6) Make post cards of your pictures and send them to family and friends over the internet.

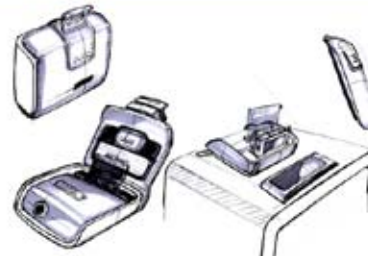


Application Focused

Design-by-Clusters

Idea Sketching

Scenario Analysis





User Scenarios

&

Product Proposals

EXECUTIVE



- In between meetings I wants to work on the move.
- I don't want to carry a bulky notebook but would like to access a lot of data.
- No compromises please, a good keyboard is a must for those important mails.

- Where did I put his name card, where did I put it?



- I have an answer for this, I wish I had all my presentations here.
- Is someone keeping detailed notes? Well, I'll do it tonight.



- Darn I need to type this, give me pen and paper any time
- Do I really need to be here? Let's see if I can get an earlier flight



EXECUTIVE



PRODUCT PROPOSAL

The Executive



- The Executive combines the old and new in a form factor that is familiar and acceptable.
- It has the power that exec's need without trouble of carrying a notebook.



- But when the time calls for it, flip open the big keyboard to answer those lengthy e-mails.



EXECUTIVE

PRODUCT PROPOSAL

The Modular





- As a UMPC this unit has full blown Windows® capabilities.
- Slide it into the notebook and you have the convenience of a big work station.
- Never again I forget to download important data.



- Also the notebook form-factor changes.
- All components are in the Modular so the screen and keyboard can be ultra slim.
- Imagine the possibilities with an OLED screen.





HOME

User Scenarios
&
Product Proposals

VK



- Recipes from the net, that would be convenient.
- Why don't they leave a note ?



- Shopping list, shopping list, where have you gone?
- What's going on in the living room?





- The baby is asleep.



- The house is secure.



- The ambiance is all right.

- Nothing can go wrong tonight.



HOME

PRODUCT PROPOSAL

The Butler





- When off, the butler's display becomes invisible behind a metallic screen.
- 4 short-cut buttons allow easy application access.
- The operative words are Minimal & sleek.





- In the kitchen, just snap the Butler in the fridge/ printer cradle.
- When off, it's a traditional notepad.
- Push a button and you can print Post-it notes®, receipts, shopping lists, etc..
- Being wirelessly connected the butler is an Interactive kook book and fridge organizer.



- In the bedroom, the Butler connects to a speaker station and becomes your alarm clock.
- You can check your whole house before falling asleep.



User Scenarios & Product Proposals





- Let's call the girls and go shopping.
- Hey, this store advertises some great sales. Let's go in.
- Convenient, the UMPC's store map tells me where those gorgeous shoes are located.
- Scan in the bar code, I want to know everything about this jacket.
- Look, net reviews rate this movie really high.
- Got to show my friends the unbelievable deal I made.
- Checked my bank account....Yep I can afford this.
- No more coins, so easy.

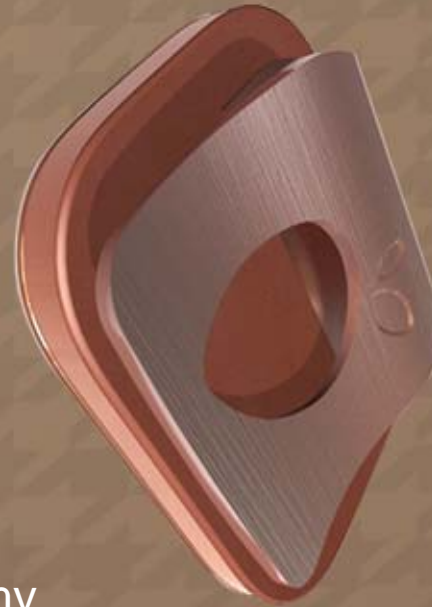






PRODUCT PROPOSAL

The Valentine



- It's always difficult finding things in my purse.
- The Valentine has a clip attachment that fits in or on any bag.
- Put it outside and make statements to the world.





SHOPPING



PRODUCT PROPOSAL

The Walletino



- Money, computing power, daily shopping management and my make-up all in one. The Walletino is my life.





SHOPPING



PRODUCT PROPOSAL

The Expressionato





- Depending on my mood, I change bags.
- Depending on my mood, I make statements to the world.



An aerial photograph of a vast, snow-covered mountain range under a clear blue sky. In the foreground on the right, two large jet engines from an aircraft are visible, partially obscuring the view of the mountains. The word "travel" is written in a large, black, lowercase sans-serif font across the bottom left of the image.

travel

User Scenarios & Product Proposals

- What flight am I on? Where is the gate? This airport map is great!
- Let's check the train schedule one more time.



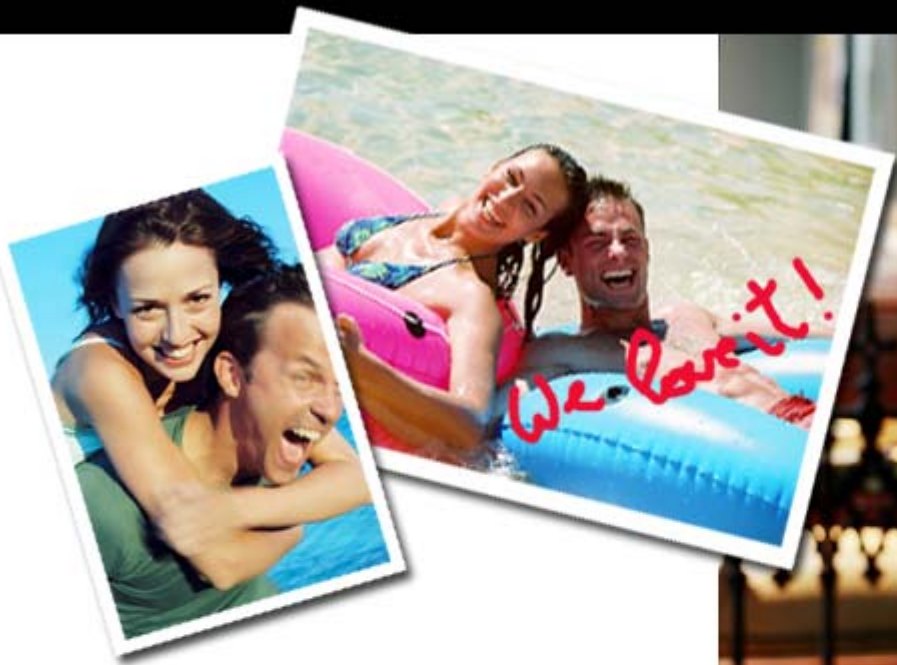
- Tour guide around town?
In my language please.

travel



- What did he say? Lucky the UMPC can translate for us.
- Pictures, pictures on the wall who is the fairest of them all?





- Now make some post cards and send them to family and friends.



An aerial photograph of a vast, snow-covered mountain range under a clear blue sky. In the foreground on the right, a large, dark jet engine is visible, partially obscuring the view of the mountains. The word "travel" is written in a large, black, sans-serif font across the bottom left of the image.

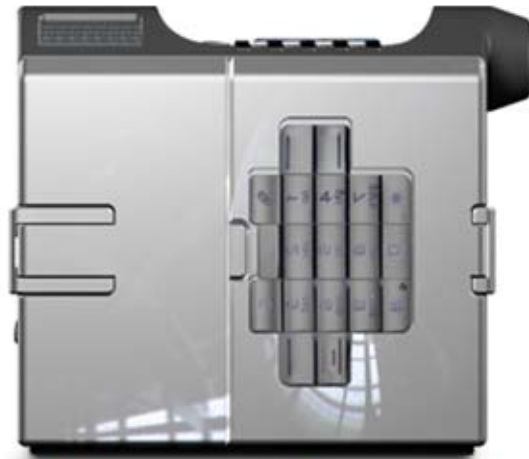
travel

User Scenarios & Product Proposals

PRODUCT PROPOSAL

The Holiday Mate





- No more downloading and finding archives.
- It's all on my system already.
- And the good bit, it acts and feels like a regular camera.



- The swimming pool, I've got time. Why not edit family pictures and movies right here.
- A big screen and editing controls. This is starting to look pretty professional.



- No more strange internet cafes, I've got a full system right here in my hotel room.
- Let's make our friends jealous...



The Executive



The Modular



The Butler



The Valentine & Expressionato



The Walletino



The Holiday Mate

We developed these product proposals to iterate that there is a future for UMPC's. As long as consumer companies take the leap to develop not one-product-fits-all but application and user focused product solutions.

- It's not about making small LCD display, the industry is working on that.
- It's not about making small keyboards, the industry is working on that.
- It's not about making small components, VIA is working on that.
- The technical future of the UMPC depends on a much less 'sexy' technology.
- How long will it take companies to develop small and long lasting batteries!



Thank you for
your time and we
hope you found it
interesting.

